

AMENDMENTS TO THE SPECIFICATION

A Preliminary Amendment was filed on May 24, 2006 in order to correct minor typographical errors and to include a cross-reference to related applications. The following amendments supplement the revisions set forth in the 2006 Preliminary Amendment:

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- On page 8, please insert the following descriptions of Figures 11C, 11D, and 11E between the description of Figure 11B and Figure 12:

Figure 11C is a perspective view of an embodiment of an adjustable support mechanism according to the present invention utilizing a half nut.

Figure 11D is a perspective view of an embodiment of an adjustable support mechanism according to the present invention utilizing a full nut.

Figure 11E is a perspective view of an embodiment of an adjustable support mechanism according to the present invention utilizing a helical mesh teeth arrangement.

- On page 10, please amend the paragraph beginning with the text “ The screw drive 34 is formed...” as follows:

The screw drive 34 is formed of a cylinder 20 having a helical groove 26 extending around its periphery. A hole 36 extends through the cylinder 20. The bracket 12 is pivotally coupled to the connecting member 16 via an axle in the form of a shaft 30 which extends through the hole 36 and holes in side walls 28 of the connecting member 16. The axle shaft 34 30 is connected to the side walls 28, but cylinder 20 can

rotate about axle shaft 30. In other embodiments the axle shaft 30 rotates in relation to the side walls 28 and is fixed in relation to the cylinder 20.

- On page 12, please amend the paragraph beginning with the text “ Figures 8 and 9 show...” as follows:

FIGS. 8 and 9 show a further alternative embodiment with two linking members 18. Each of the linking members 18 has a collar 22 at either end. A follower pin (not shown) projects inwardly from the collars 22 to engages with a corresponding helical groove 24 on the screw drive 20. It can be seen that the direction[[.]] of rotation of the grooves 24 towards either end of the screw drive 34 are in opposite directions so that with rotation of the screw drive 34 the pair of linking members 18 either move towards one another or move apart from one another.

- On page 12, please amend the paragraph beginning with the text “ In Figure 9 essentially...” as follows:

In FIG. 9 essentially the same adjustable support mechanism is shown with the relative position of the brackets 12 and 14 being different when compared to FIG. 8. The linking members 18 are their maximum distance apart. Providing two linking members 18 moving in opposite directions, neutralises thrust created as the linking members 18 move. [[,]]

- On page 12, please amend the paragraph beginning with the text “Referring to FIG. 10 ...” as follows:

_____ Referring to FIG. 10 a similar concept to that shown in FIGS. 8 and 9 is employed in this adjustable support mechanism. There are two linking members 18, but the linking members 18 are not coupled with collars 22, instead there are securing pins (not shown) similar to those used in the embodiment shown in FIG. 7. In case each linking member 18 has a hole (not shown) there through near either end through which the securing pins are positioned. Each linking member 18 has a follower pin at either end that engages with the corresponding groove 24 in the screw drives 34.

- On page 12, please amend the paragraph beginning with the text “ The collar and follower pin arrangement...” as follows:

The collar and follower pin arrangement may be replaced with a half nut 50 as shown in FIG. 11 and FIG 11C or a full nut 51 as shown in FIG. 11D. An inwardly projecting thread 52 on the inside of the half nut 50 or full nut 51 replaces the follower pin. The half nut or full nut arrangement is believed to be advantageous as loading is distributed along the inwardly projecting thread 52 rather than on a relatively small pin. It will also be appreciated that the screw drive may instead of having grooves have one or more threaded projections with the half nut having inner grooves rather than an inwardly projecting thread.

- On page 13, please amend the paragraph beginning with the text “ In Figure 11A...” as follows:

In FIG. 11A an alternative coupling arrangement between the screw drive 34 and ~~connecting~~ linking member 18 is shown. In this embodiment ~~connecting~~ linking

member 18 pivots about axle 19 which extends from the back plate 68 of the connecting member 16. In this embodiment the screw drive 34 includes helical mesh teeth 27 and the follower is in the form of helical mesh teeth 25. The teeth 27 and 25 form a helical crossed gear. [[,]] An example of a helical crossed gear is shown in ~~FIG. 11B~~ FIGS 11B & 11D. The linking member 18 may in effect be formed by removing the superfluous side portions above and below the lines indicated as X-X in FIG. 11B.

- On page 13, please amend the paragraph beginning with the text “Referring to FIG. 12, ...” as follows:

Referring to FIG. 12, a biasing means 54 in the form of a spring is shown. The spring 54 urges the linking member 18 to return to a rest position. This encourages the planar members 32 ~~and 34~~ to remain in the same plane if the return position of the linking member 18 is in the centre of the connecting member 16, as shown. Movement of the linking member 18 in either direction due to pivotal movement of the brackets 12 and 14 with respect to the connecting member 16 will cause translation of the brackets 12 and 14 with respect to one another. Such movement must overcome the bias of the spring 54. when the moving force ends and subject to the adjustable support member not being locked in position, the biasing force will urge the linking member 18 to return to the rest position. The brackets 12 and 14. will also translate back to their rest positions relative to one another.

- On page 13, please amend the paragraph beginning with the text “In FIGS. 13 and 13A ...” as follows:

In FIGS. 13 and 13A the adjustable support mechanism 10 includes a locking mechanism. In this embodiment axle [[10]] shaft 30 is fixed to the cylinder 20 and able to rotate within the hole 36. The locking mechanism includes a threaded end 60 of shaft 30 and a knob 56 on the outside of the connecting member 16. The knob 56 includes a jam 58 on an inner face adjacent to the side wall 28 of the connecting member 16. The shaft 60 is threadingly connected to the knob 56 so that when the knob 56 is rotated the jam 58 moves towards or away from the sidewall 28. When the jam 58 moves far enough towards the side wall 28 it will contact the side wall 28 and prevent the shaft 30 [[it]] from rotating with respect to the connecting member 16 thus locking the adjustable support mechanism in position. Alternatively the knob 56 may be fixed to the cylinder 20 via the shaft 30 (without the thread) and may be rotatable about its length with respect to the connecting member 16, so that it can be used to assist in pivoting the cylinder 20 in relation to the connecting member 16, thereby making adjustment of the support easier.

- On page 14, please amend the paragraph beginning with the text “FIGS. 14, 14A and 15 show ...” as follows:

FIGS. 14, 14A and 15 show an angle adjustment mechanism comprising a shaft 30 fixed to a knob 62 on the outside of the connecting member 16. The shaft 30 is

threadingly coupled to the side wall 28 of connecting member 16. The shaft 30 is also engaged with the cylinder 20 so that transverse movement of the shaft 30 causes transverse movement of the cylinder 20, but rotation of the cylinder 20 does not cause rotation of the shaft 30 and vice versa. When the knob 62 is rotated it moves through the thread in the side wall 28 which causes the shaft 30 and therefore the cylinder 20 to move transversely relative to the connecting member 16. The cylinder 20 may be transversely movable in relation to the connecting member 16 and planar member 32 34 of the bracket 14. The cylinder 20 must be shorter than the width of the connecting member 16, The cylinder 20 may be orbitally coupled to the planar member 32 34 of the bracket 14 so that the planar member 32 34 moves in an orbiting manner about the centre of rotation of the cylinder 20 with rotation of the cylinder 20. Due to the screw jack arrangement with the linking member 18 transverse movement of the cylinder causes the screw drive 34 to rotate with respect to the connecting member 16 thereby adjusting the angle of the planar member 32 34 of the bracket relative to the connecting member 16. An alternative locking means is shown in FIGS. 17 to 19. One hole 66 of the holes 46 in the linking member 18 (through which one of the securing pins 42 passes) is slotted to allow the linking member 18 to move slightly towards or away from a backing plate 68 of the connecting member 16. The linking member 18 includes a corrugated region 70 adjacent a corresponding corrugated region 72 of the backing plate 68.

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